

1 CLAIMS

2  
3 1. A software architecture for a distributed computing system  
4 comprising:

5 an application configured to handle requests submitted by remote devices  
6 over a network; and

7 an application program interface to present functions used by the  
8 application to access network and computing resources of the distributed  
9 computing system, the application program interface comprising various types  
10 related to constructing user interfaces.  
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12 2. A software architecture as recited in claim 1, wherein the various  
13 types comprise classes, interfaces, delegates, structures and enumerations.  
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15 3. A software architecture as recited in claim 1, wherein the distributed  
16 computing system comprises client devices and server devices that handle requests  
17 from the client devices, the remote devices comprising at least one client device.  
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19 4. A software architecture as recited in claim 1, wherein the distributed  
20 computing system comprises client devices and server devices that handle requests  
21 from the client devices, the remote devices comprising at least one server device  
22 that is configured as a Web server.  
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1           5.     An application program interface embodied on one or more computer  
2 readable media, comprising: multiple types related to constructing user interfaces,  
3 the types comprising classes, interfaces, delegates, structures and enumerations.  
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5           6.     An application program interface as recited in claim 5, wherein the  
6 classes comprise a forms class that represents a window or a dialog box that makes  
7 up an application's user interface.  
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9           7.     An application program interface as recited in claim 6, wherein the  
10 forms class has multiple members comprising one or more of: public static  
11 properties, public static methods, public instance constructors, public instance  
12 methods, public instance properties, public instance events, protected instance  
13 properties, and protected instance methods.  
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15           8.     An application program interface as recited in claim 5, wherein the  
16 type comprising the interfaces comprises a button control interface that allows a  
17 control to act like a button on a form.  
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19           9.     An application program interface as recited in claim 5, wherein the  
20 type comprising the interfaces comprises a container control interface that  
21 provides functionality for a control to act as a parent for other controls.  
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23           10.    An application program interface as recited in claim 5, wherein the  
24 type comprising the interfaces comprises an editing notification interface.  
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1       **11.**    An application program interface as recited in claim 5, wherein the  
2 type comprising the interfaces comprises a data object interface that provides a  
3 format independent mechanism for transferring data.

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5       **12.**    An application program interface as recited in claim 5, wherein the  
6 type comprising the interfaces comprises a feature support interface that specifies  
7 a standard interface for retrieving feature information from a current system.

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9       **13.**    An application program interface as recited in claim 5, wherein the  
10 type comprising the interfaces comprises a message filter interface.

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12       **14.**    An application program interface as recited in claim 5, wherein the  
13 type comprising the interfaces comprises a handle-exposing interface to expose  
14 handles.

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16       **15.**    An application program interface as recited in claim 5, wherein the  
17 type comprising the interfaces comprises one or more of the following interfaces:

18       a button control interface that allows a control to act like a button on a  
19 form;

20       a container control interface that provides functionality for a control to act  
21 as a parent for other controls;

22       an editing notification interface;

23       a data object interface that provides a format independent mechanism for  
24 transferring data;

1 a feature support interface that specifies a standard interface for retrieving  
2 feature information from a current system;

3 a message filter interface; and

4 a handle-exposing interface to expose handles.

5  
6 **16.** A distributed computer software architecture, comprising:

7 one or more applications configured to be executed on one or more  
8 computing devices, the applications handling requests submitted from remote  
9 computing devices;

10 a networking platform to support the one or more applications; and

11 an application programming interface to interface the one or more  
12 applications with the networking platform, the application programming interface  
13 comprising various types related to constructing user interfaces.

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15 **17.** A distributed computer software architecture as recited in claim 16, ,  
16 wherein the various types comprise classes, interfaces, delegates, structures and  
17 enumerations.

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19 **18.** A distributed computer software architecture as recited in claim 17,  
20 wherein the classes comprises a forms class that represents a window or a dialog  
21 box that makes up an application's user interface.

1           **19.**    A distributed computer software architecture as recited in claim 18,  
2 wherein the forms class has multiple members comprising one or more of: public  
3 static properties, public static methods, public instance constructors, public  
4 instance methods, public instance properties, public instance events, protected  
5 instance properties, and protected instance methods.

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7           **20.**    A distributed computer software architecture as recited in claim 17,  
8 wherein the type comprising the interfaces comprises a button control interface  
9 that allows a control to act like a button on a form.

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11           **21.**    A distributed computer software architecture as recited in claim 17,  
12 wherein the type comprising the interfaces comprises a container control interface  
13 that provides functionality for a control to act as a parent for other controls.

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15           **22.**    A distributed computer software architecture as recited in claim 17,  
16 wherein the type comprising the interfaces comprises an editing notification  
17 interface.

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19           **23.**    A distributed computer software architecture as recited in claim 17,  
20 wherein the type comprising the interfaces comprises a data object interface that  
21 provides a format independent mechanism for transferring data.

1           24.    A distributed computer software architecture as recited in claim 17,  
2 wherein the type comprising the interfaces comprises a feature support interface  
3 that specifies a standard interface for retrieving feature information from a current  
4 system.

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6           25.    A distributed computer software architecture as recited in claim 17,  
7 wherein the type comprising the interfaces comprises a message filter interface.

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9           26.    A distributed computer software architecture as recited in claim 17,  
10 wherein the type comprising the interfaces comprises a handle-exposing interface  
11 to expose handles.

12  
13           27.    A distributed computer software architecture as recited in claim 17,  
14 wherein the type comprising the interfaces comprises one or more of the following  
15 interfaces:

16               a button control interface that allows a control to act like a button on a  
17 form;

18               a container control interface that provides functionality for a control to act  
19 as a parent for other controls;

20               an editing notification interface;

21               a data object interface that provides a format independent mechanism for  
22 transferring data;

23               a feature support interface that specifies a standard interface for retrieving  
24 feature information from a current system;

25               a message filter interface; and

1 a handle-exposing interface to expose handles.

2  
3 **28.** A computer system including one or more microprocessors and one  
4 or more software programs, the one or more software programs utilizing an  
5 application program interface to request services from an operating system, the  
6 application program interface including separate commands to request services  
7 comprising services related to constructing user interfaces.

8  
9 **29.** A method, comprising:  
10 managing network and computing resources for a distributed computing  
11 system; and  
12 exposing a set of functions that enable developers to access the network and  
13 computing resources of the distributed computing system, the set of functions  
14 comprising functions to facilitate construction of user interfaces

15  
16 **30.** A method as recited in claim 29, further comprising receiving a  
17 request from a remote computing device, the request containing a call to the set of  
18 functions.

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20 **31.** A method, comprising creating a namespace with functions that  
21 enable drawing and construction of user interfaces, the name space defining  
22 classes, interfaces, delegates, structures and enumerations.

1       **32.**    A method as recited in claim 31, wherein the namespace defines a  
2 forms class that represents a window or a dialog box that makes up an  
3 application's user interface.  
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5       **33.**    A method as recited in claim 32, wherein the forms class has  
6 multiple members comprising one or more of: public static properties, public static  
7 methods, public instance constructors, public instance methods, public instance  
8 properties, public instance events, protected instance properties, and protected  
9 instance methods.  
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11       **34.**    A method as recited in claim 31, wherein the namespace defines an  
12 interface comprising a button control interface that allows a control to act like a  
13 button on a form.  
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15       **35.**    A method as recited in claim 31, wherein the namespace defines an  
16 interface comprising a container control interface that provides functionality for a  
17 control to act as a parent for other controls.  
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19       **36.**    A method as recited in claim 31, wherein the namespace defines an  
20 interface comprising an editing notification interface.  
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22       **37.**    A method as recited in claim 31, wherein the namespace defines an  
23 interface comprising a data object interface that provides a format independent  
24 mechanism for transferring data.  
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1           **38.**    A method as recited in claim 31, wherein the namespace defines an  
2 interface comprising a feature support interface that specifies a standard interface  
3 for retrieving feature information from a current system.  
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5           **39.**    A method as recited in claim 31, wherein the namespace defines an  
6 interface comprising a message filter interface.  
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8           **40.**    A method as recited in claim 31, wherein the namespace defines an  
9 interface comprising a handle-exposing interface to expose handles.  
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